

REMARKS/ARGUMENTS

I. STATUS OF CLAIMS

Claims 1-14, 28-41 and 55-68 are rejected by Examiner.

I. RESPONSE TO ARGUMENTS

The Office Action states that the “examiner notes the ‘frame-specific tags’ are defined as ‘tags that indicate start and end points of program segments’ as defined on page 3 of applicants specification and thereby this definition is incorporated into the grounds of rejection.”.

Applicant respectfully disagrees with the Office Action’s conclusion. Tags are described throughout the Specification in detail and have many different purposes. The tags described in the Specification are frame-accurate for any command and control sequence. This is supported at least on page 26, lines 15-20, page 21, lines 9-12, page 25, lines 29-36, page 32, line 31-page 33, line 1. It is clear throughout the Specification that frame-specific tags are exactly as stated, namely, frame-specific, and are not restricted to “tags that indicate start and end points of program segments”.

III. CLAIM REJECTIONS – 35 U.S.C. § 103

The Final Office Action rejected Claims 1-10, 12-14, 28-37, 39-41, 55-64 and 66-68 under 35 U.S.C. § 103(a) as being unpatentable by Zigmond et al (US 6,400,407) in view of Browne et al (WO 92/22983) in further view of Iggulden (US 6,404,977). The rejection is respectfully traversed.

Claims 1, 28, and 55 have been amended to clarify the invention and appear as follows;

1. A process for frame specific tagging of media streams with tag translation at a receiver, comprising the steps of:
 - receiving a media stream at said receiver;

storing said media stream on a storage device on said receiver;
detecting frame-specific tags inserted into said media stream;
processing said tags;
displaying program material in said stored media stream from said storage device to a viewer;

wherein said processing step performs appropriate actions in response to said tags which include command and control information instructing said receiver to perform certain actions.

28. An apparatus for frame specific tagging of television audio and video broadcast streams with tag translation at a receiver, comprising:

a storage device on said receiver;
a module for receiving said media stream at said receiver;
a module for storing said media stream on said storage device;
a module for detecting frame-specific tags inserted into said media stream;
a module for processing said tags;
a module for displaying program material in said stored media stream from said storage device to a viewer;

wherein said processing step performs appropriate actions in response to said tags which include command and control information instructing said receiver to perform certain actions.

55. A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps for frame specific tagging of television audio and video broadcast streams with tag translation at a receiver, comprising the steps of:

receiving said media stream at said receiver;
storing said media stream on a storage device on said receiver;
detecting frame-specific tags inserted into said media stream;
processing said tags;
displaying program material in said stored media stream from said storage device to a viewer;

wherein said processing step performs appropriate actions in response to said tags which include command and control information instructing said receiver to perform certain actions.

In particular, Zigmond does not teach or disclose a system wherein said processing step performs appropriate actions in response to said tags which include command and control information instructing said receiver to perform certain actions as claimed in Claims 1, 28, and 55. All Zigmond teaches is that a logical address such as a URL can be sent in line 21 of the VBI. Zigmond makes no mention of tags which include command and control information

instructing said receiver to perform certain actions and therefore does not contemplate such.

Zigmond specifically states that real-time logical links, i.e., links in line 21 of the VBI (col. 10, lines 50-52) contain URL links relevant to a particular episode, the Zigmond's system merely notifies the user that a URL is available. Col. 11, lines 4-15 state:

“It is contemplated that batch mode logical address links may include links to information of general interest to the viewer while real-time logical address links may include links to more specific information. For example, EPG information may include a link to a Seinfeld fan club home page or other resource of general interest to Seinfeld viewers. In contrast, the real-time logical address links received during the Seinfeld program may contain links relevant to the particular Seinfeld episode. In this example, since the real-time logical address links and the batch mode logical address links do not interfere with one another, both may be presented to the viewer.”

Col. 9, lines 17-21 state:

“If a valid logical address link is present, then processing continues with step 540. At step 540, an indication is provided to the viewer that a logical address link is associated with the TV program currently being viewed.”

Therefore, Zigmond does not contemplate a system wherein said processing step performs appropriate actions in response to said tags which include command and control information instructing said receiver to perform certain actions as claimed in Claims 1, 28, and 55.

Further, Iggulden does not teach or disclose the detection and processing of frame specific tags as the Office Action states. The Office Action states “The tags are referred to as event markers and further send instruction to the receiver on commands such as muting the broadcast segment as described in column 16, lines 14-58.” However, Iggulden does not teach what the Office Action states.

Iggulden's event markers are not tags as the Office Action posits. Iggulden clearly defines the event markers as video frames that are used to separate segments. The frames are typically inserted by broadcasters in order to give a few frames for the local broadcasters to trigger their commercial insertion editors as the broadcast program is broadcasted from the local broadcaster. Iggulden gives examples, e.g., in North America, the method may, for example, identify a period of one or more black frames combined with low audio as being an event marker

representative of the beginning of a segment. These event markers carry no information and further, are not tags, but rather, empty video frames. Col. 6, line 53-col. 7, line 1 state (emphasis added):

“Depending upon the implementation, the method identifies the beginning of a received segment by detecting pre-determined **event markers** which separate segments. When implemented for use in North America, **the method may, for example, identify a period of one or more black frames combined with low audio as being an event marker representative of the beginning of a segment.** When implemented for use in Europe, the method may further identify periods of one or more colored frames, such as blue frames, combined with low audio as being an event marker. When implemented for use in Japan, is the method may instead identify a frame break combined with a period of low audio as being an event marker. In any case, once an event marker denoting the beginning of a broadcast segment is detected, the method promptly detects a signature from the segment for comparison against stored signatures.”

Iggulden further states that when he detects a signature, it is not accurate and some of the intended material that is supposed to be excluded from recording is recorded. This means that Iggulden teaches away from frame-specific tags by teaching that his signature detection is an estimation and not accurate. Col. 7, lines 5-10 state (emphasis added):

“By detecting the signature near the beginning of the segment, the signature can be compared against stored signatures to allow the VCR to be paused **before much of the received segment has been recorded.** Preferably, the signature is based on frames appearing during the first one second of the segment.”

Iggulden further supports the fact that his signature detection is not accurate in col. 16, lines 36-42 (emphasis added):

“Hence, the television signal is not stored or otherwise delayed but is immediately output in real-time. The broadcast segment signature evaluation process is performed shortly after detection of the event marker **such that very little of the television signal is output before a determination of whether the signal needs to be muted is achieved.**”

Additionally, Iggulden’s signatures are a calculation performed at the time the signal is received and do not carry any command or control information. Col. 10, lines 40-52 state:

“Each unique broadcast segment has a unique signature. The signature may be any unique characteristic of the segment that can be used to distinguish one segment from another. As will be described below, in the exemplary implementation, the signature is a bit string hash code representative of whether each of a set of selected lines of a selected frame of a received segment has an average luminance level that exceeds a pre-determined threshold. The selected frame may be, for example, the tenth frame following the completion of the event marker marking the beginning of the segment. The selected

lines may be, for example, the first 64 odd lines of the frame beginning at line 23. Other signatures may alternatively be employed.”

Therefore, Zigmond in view of Browne and further in view of Iggulden does not teach or disclose the invention as claimed.

Claims 1, 28, and 55 are allowable. Claims 2-10, 12-14, and 29-37, 39-41, and 56-64, 66-68 are dependent upon Claims 1, 28, and 55, respectively, and are allowable. Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

IV. CLAIM REJECTIONS – 35 U.S.C. § 103

The Final Office Action rejected Claims 11, 38, and 65 under 35 U.S.C. § 103(a) as being unpatentable by Zigmond et al (US 6,400,407) in view of Browne et al (WO 92/22983) in further view of Iggulden (US 6,404,977) in further view of Dunn et al. (US 5,648,824).

The rejection under 35 U.S.C. §103(a) is deemed moot in view of Applicant’s comments regarding Claims 1, 28, and 55, above. Claims 11, 38, and 65 are dependent upon independent Claims 1, 28, and 55, respectively. Therefore, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

V. MISCELLANEOUS

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

The Applicants believe that all issues raised in the Office Action have been addressed and that allowance of the pending claims is appropriate. Entry of the amendments herein and further examination on the merits are respectfully requested.

The Examiner is invited to telephone the undersigned at (408) 414-1080 ext. 214 to discuss any issue that may advance prosecution.

No fee is believed to be due specifically in connection with this Reply. To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. § 1.136. The Commissioner is authorized to charge any fee that may be due in connection with this Reply to our Deposit Account No. 50-1302.

Respectfully submitted,

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CERTIFICATE OF TRANSMISSION VIA EFS-WEB

Pursuant to 37 C.F.R. 1.8(a)(1)(ii), I hereby certify that this correspondence is being transmitted to the United States Patent & Trademark Office via the Office electronic filing system in accordance with 37 C.F.R. §§1.6(1)(4) and 1.8(a)(1)(i)(C) on the date indicated below and before 9:00 PM PST.

Submission date: July 25, 2007

by /KirkDWong#43284/

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